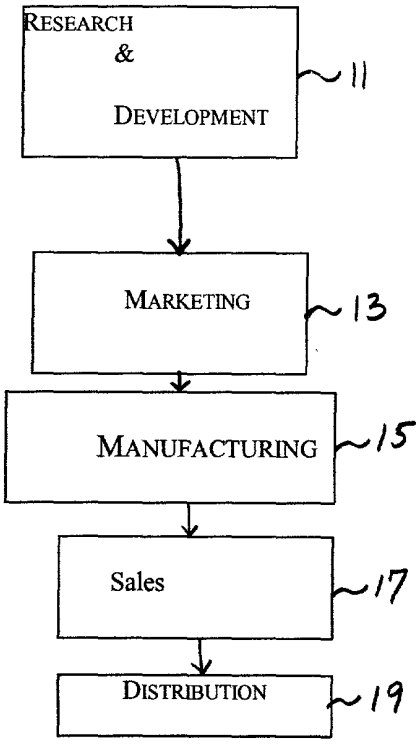

FIG. 1 - PRODUCT CYCLE

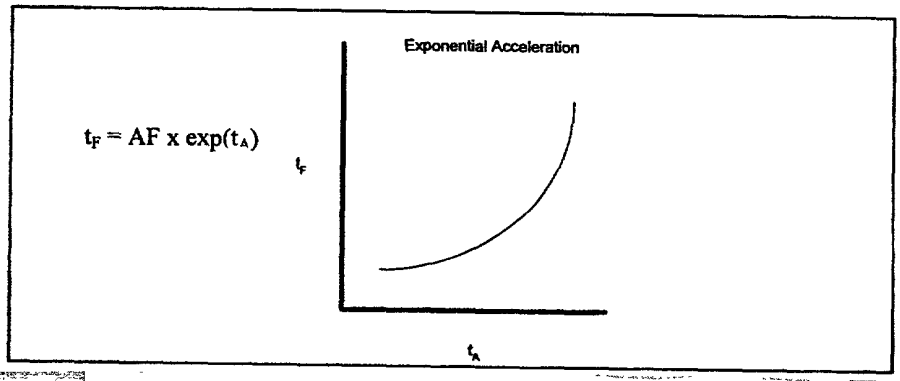

FIG. 2 – Exponential Acceleration

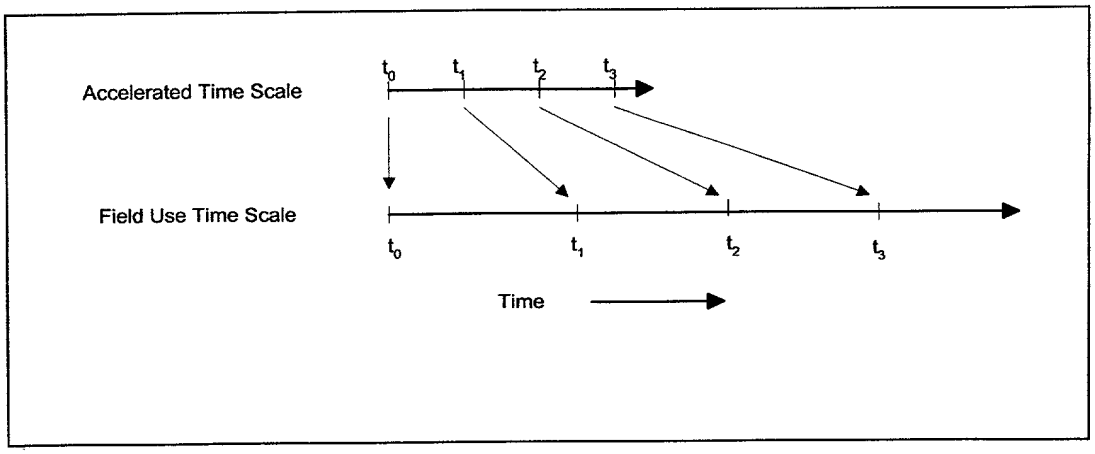

FIG. 3 - Correlation between Accelerated and Field Use Time Scales

UNIT A

	CSS	HSS	RT	Vib	CE	Average Time to Failure	λ
HALT 1 First Failure (time to failure in hours)	2	1.35	0.23	0.88	0.925	1.077	0.929
HALT 2 First Failure (time to failure in hours)	1.525	1.51	1.05	1.38	1.45	1.383	0.723

$\overline{R}^*$ (see eq. 6) 0.306

$\overline{R}$ (see eq. 7) 1.36 ← ESTIMATE FOR RELATIVE LIFE R

BOM MTBF 298462

MTBF for Redesigned Unit (see eq. 12) 405908

VAR($\overline{R}^*$) = 0.614

90% Confidence Limits for $\overline{R}^*$ (see eq.10)

Lower Limit -0.98

Upper Limit 1.59

90% Confidence Limits for **R** (see eq.11)

Lower Limit 0.374

Upper Limit 4.900

FIG. 4

UNIT B

	CSS	HSS	RT	Vib	CE	Average Time to Failure	λ
HALT 1 First Failure (time to failure in hours)	1.23	1.38	1.38	1.48	0.18	1.13	.88
HALT 2 First Failure (time to failure in hours)	2.03	1.38	.225	1.83	.225	1.14	.88

$\overline{R}^*$ (see eq. 6) 0.0

$\overline{R}$ (see eq. 7) 1.0 ← ESTIMATE FOR RELATIVE LIFE R

BOM MTBF 232000

MTBF for Redesigned Unit 232000

(see eq. 12)

VAR($\overline{R}^*$) = 0.516

90% Confidence Limits for $\overline{R}^*$

(see eq.10)

Lower Limit -1.18

Upper Limit 1.18

90% Confidence Limits for **R**

(see eq.11)

Lower Limit 0.306

Upper Limit 3.250

FIG. 5

UNIT C

	CSS	HSS	RT	Vib	CE	Average Time to Failure	λ
HALT 1 First Failure (time to failure in hours)	1.48	1.20	0.55	1.22	0.81	1.05	0.95
HALT 2 First Failure (time to failure in hours)	1.87	1.30	1.67	1.06	0.33	1.25	0.80

$\overline{R}^*$ (see eq. 6) 0.20

$\overline{R}$ (see eq. 7) 1.22 ← ESTIMATE FOR RELATIVE LIFE R

BOM MTBF 363300

MTBF for Redesigned Unit 443226

(see eq. 12)

VAR($\overline{R}^*$) = 0.53

90% Confidence Limits for $\overline{R}^*$

(see eq.10)

Lower Limit -.99

Upper Limit 1.39

90% Confidence Limits for **R**

(see eq.11)

Lower Limit 0.368

Upper Limit 4.010

FIG. 6